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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,861	12/12/2003	Michael R. McGovern	86373SLP	1546
759	90 12/28/2004		EXAMINER	
Pamela R. Cro	cker		SONG, HOON K	
Patent Legal Sta	ıff			
Eastman Kodak	Company		ART UNIT	PAPER NUMBER
343 State Street			2882	
Rochester, NY	14650-2201		DATE MAILED: 12/28/2004	4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary  10/734,861  Examiner Hoon Song 2882  - The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  Extensions of time may be available under the provisions of 37 CFR 1.135(a). In no event, however, may a reply be timely filed after St (0) MONTHS from the mailing date of this communication.  If the period for reply specified above is less than thiry (30) days, reply within the statutory minimum of thirty (30) days will be considered timely.  If the period for reply within the set or extended period for reply will, be reply within the set ply within the set or extended period for reply with period set or extended period for reply within the set ply within the set ply within the set of the communication.  Failure to reply within the set or extended period for reply with period set of the communication, and purply and will exply set the set of the communication.  Failure to reply within the set or extended period for reply with period will not set the set of the communication.  Failure to reply within the application of the set of the communication.  This action is FINAL.  2b)  This action is non-final.  3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4)  Claim(s) 1-6 is/are pending in the application.  4a) Of the above claim(s) is/are allowed.  Claim(s) 1-6 is/are rejected.  Claim(s) 5 is/are endored to the set of the commu
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10)⊠ The drawing(s) filed on <u>12 December 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.
Priority under 35 U.S.C. § 119
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No
3. Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
Attachment(s)
1) X Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)
Notice of Draftsperson's Patent Drawing Review (PTO-948)  Paper No(s)/Mail Date.
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date 12/12/2003.  5) Notice of Informal Patent Application (PTO-152)  6) Other:

Application/Control Number: 10/734,861

Art Unit: 2882

#### **DETAILED ACTION**

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by McLean (US 5574768).

Regarding claim 1, McLean teaches an x-ray film packet, comprising: an outer envelope (14);

a film chip (12) disposed within the outer envelope (14); and

a non-lead sheet (15) disposed within the outer envelope (14), the non-lead sheet being comprised substantially of tin (column 2 line 6).

(note: the recitation "intraoral" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).)

Art Unit: 2882

Regarding claim 5, McLean teaches the non-lead sheet absorbs between about 60 kVp to about 80 kVp of radiation energy (column 3 line 49, at least some of x-ray energy between the claimed range was absorbed).

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liese, Jr. (US 4912740) in view of Haskell (US 5550383).

Regarding claim 1, Liese teaches an intraoral x-ray film packet, comprising: an outer envelope (16);

a film chip (10) disposed within the outer envelope (16); and a metal sheet (14) disposed within the outer envelope (16).

However Liese fails to teach that the metal sheet is non-lead and substantially Tin.

Haskell teaches a intra oral used of Tin material as a shielding (column 5 line 61 and column 7 line 3).

It would have been obvious to one of ordinary skill in the art at the time of the invention to adapt the metal sheet of Liese with Tin material as taught by Haskell, since the Tin material of Haskell would provide the necessary protection to healthy tissue

Application/Control Number: 10/734,861

Art Unit: 2882

during radiation exposure while avoiding the toxicity of material such as lead (column 3 line 5-8 and column 9 line 55-67).

Regarding claim 6, Liese teaches the outer envelop includes a laminated perimetric edge (16PE).

Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over McLean.

Regarding claims 2-3, McLean fails to teach the non-lead sheet is comprised of at least or about 99.95 percent tin.

However, it would have been obvious to one of ordinary skill in the art at the time of the invention to adapt 100 % pure Tin material for the filter (15) since the image generated on second x-ray film (13) would be improved using the pure material than impure material which cause irregular beam filtering.

Regarding claim 4, McLean fails to teach the non-lead sheet having a thickness of about 0.002 to about 0.0024 inches.

However McLean teaches that the non-lead sheet thickness can be reduce if higher atomic number materials is selected.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the thickness of McLean with thickness of about 0.002 to about 0.0024 inches by adapting Tin material, since Tin material has higher atomic number than Copper so that thickness can be reduced while providing same functionality of modifying the x-ray beam intensity incident upon the back screen film combination, secondly to optically isolate the front and back screen film combinations and thirdly to

Application/Control Number: 10/734,861 Page 5

Art Unit: 2882

radiographically isolate the front and back screen film cominations so as to reduce the amount of K-characteristic photon transfer (column 3 line 8-13).

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoon Song whose telephone number is (571) 272-2494.

The examiner can normally be reached on 8:30 AM - 5 PM, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Glick can be reached on (571) 272 - 2490. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HKS 12/22/04

SUPERVISORY PATENT EXAMINER